

Applicant : Schelto Van Doorn
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Attorney's Docket No.: 00P7629US / 064001

REMARKS

The applicant thanks the Examiner for the telephone interview conducted on June 19, 2003. Claims 1-10 are pending. The claims have been rejected under 35 U.S.C. § 103(a) as being unpatentable over the applicant's admitted prior art in view of U.S. Patent No. 6,336,269 ("Eldridge"). Claim 1 has been amended. No new matter is added. The applicant respectfully traverses the rejections, and requests reconsideration in view of the amendment and following remarks.

Claim 1 recites a transducer including a housing mountable on a substrate. The housing is configured to receive a jumper cable. An input/output lead is supported by the housing and is configured to directly contact an input/output lead of an integrated circuit, where the integrated circuit is also mounted on the substrate. The housing also supports electronic circuitry to transition between an electronic data transfer protocol of the jumper cable and an electronic data protocol of the integrated circuit.

The Examiner's reference to the "applicant's admitted prior art" is directed to the applicant's description in the background section of transducers. The background section does not describe a transducer that includes the limitations recited in claim 1, and in particular does not describe a transducer having an input/output lead configured to *directly contact* an input/output lead of an integrated circuit.

The Examiner asserts that Eldridge (referring to FIG. 19B) discloses the concept of having an electronic component (1940) mounted on a substrate (1900) and having an I/O lead (1920) configured to directly contact an I/O lead (1922) of another electronic component (1950) mounted on the substrate (1900) (col. 92, lines 4-17; col. 91, lines 21-67 and col. 92, lines 1-26).

The applicant respectfully submits the Examiner has misconstrued what is disclosed by Eldridge. Eldridge discloses an interposer 1900 that is positioned *between* two electronic components 1940 and 1950 (col. 91, lines 36-38); the electronic components are *not mounted on a substrate* 1900. There are two contact structures 1920 and 1922, shown as bond wires, that are mounted on the interposer 1900, and the bond wires 1920 and 1922 are not mounted on the electronic components 1940 and 1950. The purpose of the interposer 1900 is to provide an electrical connection between two components (*e.g.*, 1940 and 1950) when it is not desirable to mount contact structures (*i.e.*, bond wires) directly to the electronic components being

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interconnected (col. 84, lines 60-63). Thus, what is depicted in Eldridge's FIG. 19B are two electronic components 1940 and 1950 that are interconnected by contact structures (bond wires 1920, 1922) that are mounted to an interposer positioned between the two electronic components.

By contrast, the transducer recited in claim 1 is configured such that an input/output lead of the transducer is in direct contact with an input/output lead of an integrated circuit. There is no interposer between these two components; each one has an input/output lead and the two leads are in direct contact with one another. In fact, this feature provides an advantage over the prior art, because the direct connection provides a high-speed communication channel that avoids the parasitic and high-inductance limitations generally associated with conventional metallic printed circuit board traces (specification, p. 2, lines 27-31).

Additionally, the transducer is configured to receive a jumper cable. Moreover, the transducer includes electronic circuitry to transition between the electronic data transfer protocols of the jumper cable and the integrated circuit. The transducer is not merely a mounting structure upon which contact structures can be mounted to interconnect electronic components, so that the contact structures do not need to be mounted on the electronic components themselves, which is what is disclosed by Eldridge's interposer. The components that the transducer is electrically connected to, *i.e.* the jumper cable and the integrated circuit, include their own leads, and do not require an interposer for connection. Further, the transducer includes electronic circuitry that performs a function; the circuitry transitions between the electronic data transfer protocols of the jumper cable and the integrated circuit. The interposer disclosed in Eldridge fails to include any such circuitry, and the primary function is to provide a physical structure upon which the contact structures (bond wires 1920, 1922) can be mounted.

Accordingly, the applicant's prior art in view of Eldridge fails to establish a *prima facie* case of obviousness, and claim 1 is in condition for allowance. Claims 2-9 depend from claim 1, and are allowable for at least the same reasons.